Fig.1

## Condition 1

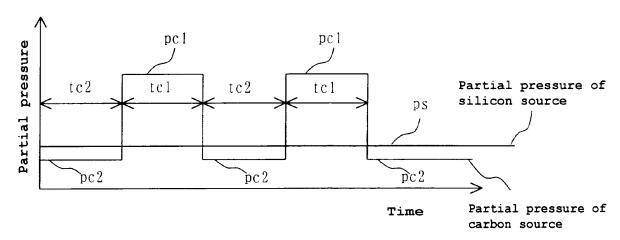
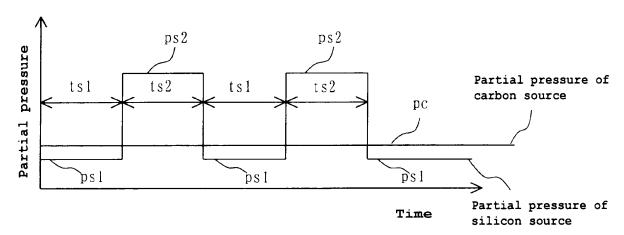


Fig.2

## Condition 2



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Fig.3

Silicon source Substrate 1 Silicon source Silicon epitaxial growth layer Substrate 2 Silicon source Carbon source Silicon epitaxial growth layer reacts Substrate 3 with carbon source, forming silicon carbide layer Silicon source Carbon source Carbon source adsorption layer

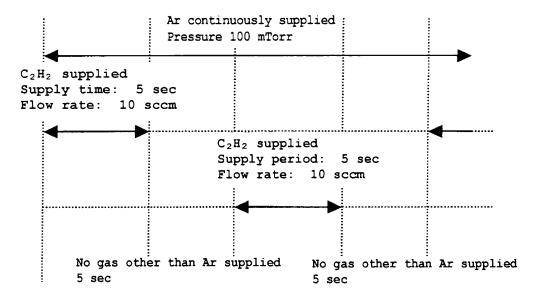
Substrate

4

Silicon epitaxial growth layer reacts

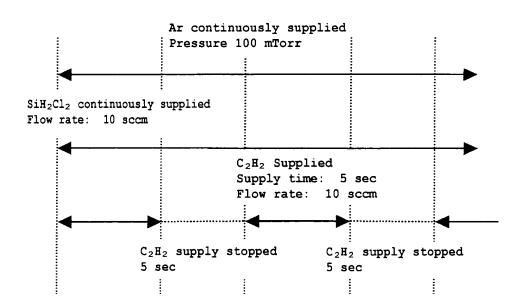
with carbon source, forming silicon carbide layer

Fig. 4



 $\texttt{Time} \quad \longrightarrow \quad$ 

Fig.5

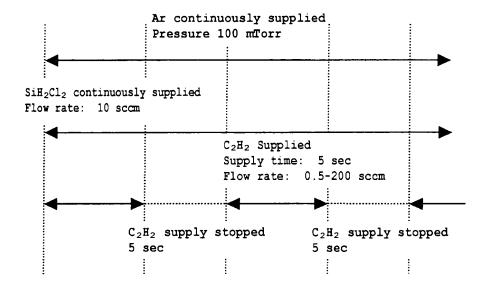


şas.

Time ----

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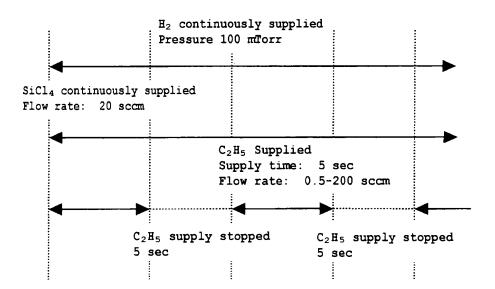
Fig.6



Time ----

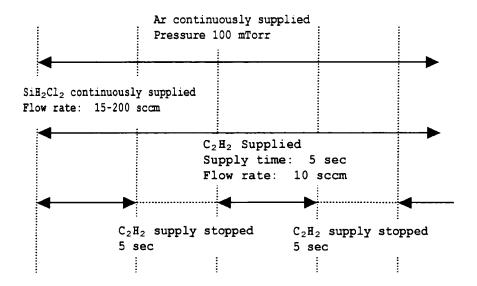
Fig.7

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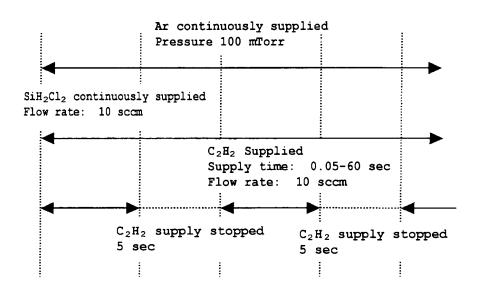
Time -----

Fig.8



Time \_\_\_\_\_

Fig.9



Time ----



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Fig.10

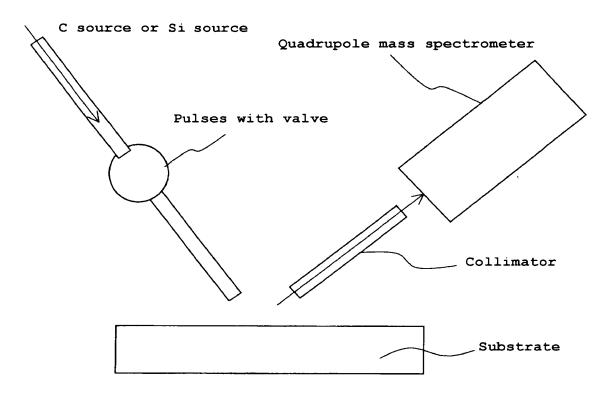
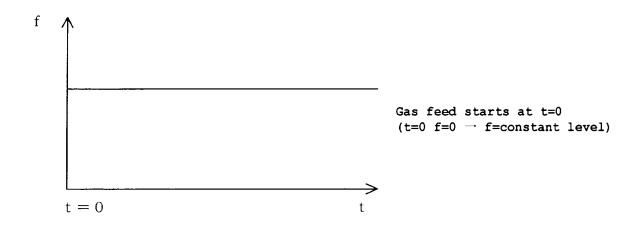


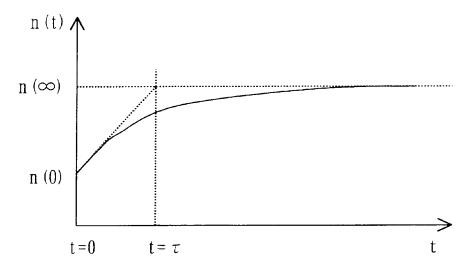
Fig.11



Change over time in gas supply



Fig.12



Change over time (relative value) of number of molecules desorbed from substrate as measured by quadrupole mass spectrometry